

We Claim:

1. A method of repairing an article affected by sulphidation, comprising the steps of:

5 providing an article having a section affected by sulphidation;
removing the affected section; and
laser cladding a replacement section to the article.

10 2. The method of claim 1, further comprising the step of removing sulphidation by abrasive cleaning.

3. The method of claim 1, further comprising the step of machining excess material from the article.

15 4. The method of claim 1, further comprising the step of heat treating the replacement section.

20 5. The method of claim 1, wherein the replacement section is similar in composition to the article

6. The method of claim 1, wherein the article is an airfoil.

7. The method of claim 6, wherein the airfoil is a turbine blade.

25 8. The method of claim 7, wherein the affected section is a part of a platform of the turbine blade.

9. The method of claim 6, wherein the airfoil is a turbine vane.

10. A method of repairing an article affected by sulphidation, comprising the steps of:

providing an article having a section affected by sulphidation;
removing the affected section by machining;
5 laser cladding a replacement section to the article; and
removing excess material resulting from the laser cladding.

11. The method of claim 10, further comprising the step of removing sulphidation by abrasive cleaning.

12. The method of claim 10, further comprising the step of heat treating the replacement section.

13. The method of claim 10 wherein the excess material is removed by machining.

14. The method of claim 10, wherein the replacement section is similar in composition to the article

15. The method of claim 10, wherein the article is an airfoil.

16. The method of claim 15, wherein the airfoil is a turbine blade.

17. The method of claim 16, wherein the affected section is a part of a root platform of the turbine blade.

18. The method of claim 15, wherein the airfoil is a turbine vane.

19. A method of repairing an airfoil affected by sulphidation, comprising the steps of:

providing an airfoil having a section affected by sulphidation;
removing the affected section of the airfoil by machining;
5 laser cladding a replacement section to the airfoil; and
restoring the dimensions of the airfoil.

20. The method of claim 18, wherein the restoring step comprises removing excess material from the airfoil resulting from the laser cladding.

21. The method of claim 18, further comprising the step of removing sulphidation by abrasive cleaning.

22. The method of claim 18, further comprising the step of heat treating the replacement section

23. The method of claim 18, wherein the replacement section is similar in composition to the turbine blade.

24. The method of claim 18, wherein the affected section is a platform of the airfoil.